



033072-044.ST25

SEQUENCE LISTING

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<120> Methods of Screening Compositions for G Protein-Coupled Receptor
Desensitization Inhibitory Activity

<130> 033072-044

<140> US 10/633,438

<141> 2003-08-01

<150> US 09/993,844

<151> 2001-11-05

<150> US 60/245,772

<151> 2000-11-03

<150> US 60/260,363

<151> 2001-01-08

<160> 65

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 43

<212> PRT

<213> Homo sapiens

<400> 1

Asn	Pro	Ile	Val	Tyr	Ala	Phe	Arg	Ile	Gln	Lys	Phe	Arg	Val	Thr	Phe
1				5					10					15	
Leu	Lys	Ile	Trp	Asn	Asp	His	Phe	Arg	Cys	Gln	Pro	Ala	Pro	Pro	Ile
			20					25					30		
Asp	Glu	Asp	Leu	Pro	Glu	Glu	Arg	Pro	Asp	Asp					
		35					40								

<210> 2

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2

Asn	Pro	Ile	Ile	Tyr	Pro	Cys	Ser	Ser	Lys	Glu	Phe	Lys	Arg	Ala	Phe
1				5					10					15	
Val	Arg	Ile	Leu	Gly	Cys	Gln	Cys	Arg	Gly	Arg	Gly	Arg	Arg	Arg	Arg
			20					25					30		
Arg	Arg	Arg	Arg	Arg	Leu	Gly	Gly	Cys	Ala	Tyr	Thr	Tyr	Arg	Pro	Trp
			35				40					45			
Thr	Arg	Gly	Gly	Ser	Leu	Glu	Arg	Ser	Gln	Ser	Arg	Lys	Asp	Ser	Leu
		50				55				60					
Asp	Asp	Ser	Gly	Ser	Cys	Leu	Ser	Gly	Ser	Gln	Arg	Thr	Leu	Pro	Ser
65					70				75					80	

Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly Ala Pro Pro Pro Val
 85 90 95
 Glu Leu Cys Ala Phe Pro Glu Trp Lys Ala Pro Gly Ala Leu Leu Ser
 100 105 110
 Leu Pro Ala Pro Glu Pro Pro Gly Arg Arg Gly Arg His Asp Ser Gly
 115 120 125
 Pro Leu Phe Thr Phe Lys Leu Leu Thr Glu Pro Glu Ser Pro Gly Thr
 130 135 140
 Asp Gly Gly Ala Ser Asn Gly Gly Cys Glu Ala Ala Ala Asp Val Ala
 145 150 155 160
 Asn Gly Gln Pro Gly Phe Lys Ser Asn Met Pro Leu Ala Pro Gly Gln
 165 170 175
 Phe

<210> 3
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 3
 Asn Pro Val Ile Tyr Thr Ile Phe Asn His Asp Phe Arg Arg Ala Phe
 1 5 10 15
 Lys Lys Ile Leu Cys Arg Gly Asp Arg Lys Arg Ile Val
 20 25

<210> 4
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 4
 Asn Pro Val Ile Tyr Thr Ile Phe Asn Gln Asp Phe Arg Arg Ala Phe
 1 5 10 15
 Arg Arg Ile Leu Cys Arg Pro Trp Thr Gln Thr Ala Trp
 20 25

<210> 5
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 5
 Asn Pro Val Ile Tyr Thr Val Phe Asn Gln Asp Phe Arg Pro Ser Phe
 1 5 10 15
 Lys His Ile Leu Phe Arg Arg Arg Arg Arg Gly Phe Arg Gln
 20 25 30

<210> 6
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 6
 Asn Pro Ile Ile Tyr Cys Arg Ser Pro Asp Phe Arg Lys Ala Phe Gln

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1           5           10           15
Gly Leu Leu Cys Ala Arg Arg Ala Arg Arg Arg His Ala Thr
20           25           30
His Gly Asp Arg Pro Arg Ala Ser Gly Cys Leu Ala Arg Pro Gly Pro
35           40           45
Pro Pro Ser Pro Gly Ala Ala Ser Asp Asp Asp Asp Asp Val Val
50           55           60
Gly Ala Thr Pro Pro Ala Arg Leu Leu Glu Pro Trp Ala Gly Cys Asn
65           70           75           80
Gly Gly Ala Ala Ala Asp Ser Asp Ser Ser Leu Asp Glu Pro Cys Arg
85           90           95
Pro Gly Phe Ala Ser Glu Ser Lys Val
100          105

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<210> 7
 <211> 92
 <212> PRT
 <213> Homo sapiens

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<400> 7
Asn Pro Leu Ile Tyr Cys Arg Ser Pro Asp Phe Arg Ile Ala Phe Gln
1           5           10           15
Glu Leu Leu Cys Leu Arg Arg Ser Ser Leu Lys Ala Tyr Gly Asn Gly
20           25           30
Tyr Ser Ser Asn Gly Asn Thr Gly Glu Gln Ser Gly Tyr His Val Glu
35           40           45
Gln Glu Lys Glu Asn Lys Leu Cys Glu Asp Leu Pro Gly Thr Glu
50           55           60
Asp Phe Val Gly His Gln Gly Thr Val Pro Ser Asp Asn Ile Asp Ser
65           70           75           80
Gln Gly Arg Asn Cys Ser Thr Asn Asp Ser Leu Leu
85           90

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<210> 8
 <211> 120
 <212> PRT
 <213> Homo sapiens

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<400> 8
Asn Pro Ile Ile Tyr Ala Phe Asn Ala Asp Phe Arg Lys Ala Phe Ser
1           5           10           15
Thr Leu Leu Gly Cys Tyr Arg Leu Cys Pro Ala Thr Asn Asn Ala Ile
20           25           30
Glu Thr Val Ser Ile Asn Asn Asn Gly Ala Ala Met Phe Ser Ser His
35           40           45
His Glu Pro Arg Gly Ser Ile Ser Lys Glu Cys Asn Leu Val Tyr Leu
50           55           60
Ile Pro His Ala Val Gly Ser Ser Glu Asp Leu Lys Lys Glu Glu Ala
65           70           75           80
Ala Gly Ile Ala Arg Pro Leu Glu Lys Leu Ser Pro Ala Leu Ser Val
85           90           95
Ile Leu Asp Tyr Asp Thr Asp Val Ser Leu Glu Lys Ile Gln Pro Ile
100          105          110
Thr Gln Asn Gly Gln His Pro Thr
115          120

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<210> 9
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 9
 Asn Pro Ile Ile Tyr Thr Thr Phe Asn Ile Glu Phe Arg Lys Ala Phe
 1 5 10 15
 Leu Lys Ile Leu His Cys
 20

<210> 10
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 10
 Asn Pro Val Ile Tyr Thr Thr Phe Asn Ile Glu Phe Arg Lys Ala Phe
 1 5 10 15
 Leu Lys Ile Leu Ser Cys
 20

<210> 11
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 11
 Asn Pro Val Ile Tyr Thr Val Phe Asn Ala Glu Phe Arg Asn Val Phe
 1 5 10 15
 Arg Lys Ala Leu Arg Ala Cys Cys
 20

<210> 12
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 12
 Asn Pro Val Ile Tyr Ala Phe Asn Ala Asp Phe Gln Lys Val Phe Ala
 1 5 10 15
 Gln Leu Leu Gly Cys Ser His Phe Cys Ser Arg Thr Pro Val Glu Thr
 20 25 30
 Val Asn Ile Ser Asn Glu Leu Ile Ser Tyr Asn Gln Asp Ile Val Phe
 35 40 45
 His Lys Glu Ile Ala Ala Ala Tyr Ile His Met Met Pro Asn Ala Val
 50 55 60
 Thr Pro Gly Asn Arg Glu Val Asp Asn Asp Glu Glu Glu Gly Pro Phe
 65 70 75 80
 Asp Arg Met Phe Gln Ile Tyr Gln Thr Ser Pro Asp Gly Asp Pro Val
 85 90 95
 Ala Glu Ser Val Trp Glu Leu Asp Cys Glu Gly Glu Ile Ser Leu Asp
 100 105 110
 Lys Ile Thr Pro Phe Thr Pro Asn Gly Phe His
 115 120

<210> 13
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 13
 Asn Pro Met Cys Tyr Ala Leu Cys Asn Lys Ala Phe Arg Asp Thr Phe
 1 5 10 15
 Arg Leu Leu Leu Leu Cys Arg Trp Asp Lys Arg Arg Trp Arg Lys Ile
 20 25 30
 Pro Lys Arg Pro Gly Ser Val His Arg Thr Pro Ser Arg Gln Cys
 35 40 45

<210> 14
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 14
 Asn Pro Ala Cys Tyr Ala Leu Cys Asn Ala Thr Phe Lys Lys Thr Phe
 1 5 10 15
 Lys His Leu Leu Met Cys His Tyr Lys Asn Ile Gly Ala Thr Arg
 20 25 30

<210> 15
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 15
 Asn Pro Val Cys Tyr Ala Leu Cys Asn Lys Thr Phe Arg Thr Thr Lys
 1 5 10 15
 Met Leu Leu Leu Cys Gln Cys Asp Lys Lys Lys Arg Arg Lys Gln Gln
 20 25 30
 Tyr Gln Gln Arg Gln Ser Val Ile Phe His Lys Arg Ala Pro Glu Gln
 35 40 45
 Ala Leu
 50

<210> 16
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 16
 Asn Pro Ala Cys Tyr Ala Leu Cys Asn Ala Thr Phe Lys Lys Thr Phe
 1 5 10 15
 Arg His Leu Leu Leu Cys Gln Tyr Arg Asn Ile Gly Thr Ala Arg
 20 25 30

<210> 17
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 17

Asn Pro Ile Cys Tyr Ala Leu Cys Asn Arg Thr Phe Arg Lys Thr Phe
 1 5 10 15
 Lys Met Leu Leu Leu Cys Arg Trp Lys Lys Lys Lys Val Glu Glu Lys
 20 25 30
 Leu Tyr Trp Gln Gly Asn Ser Lys Leu Pro
 35 40

<210> 18

<211> 24

<212> PRT

<213> Homo sapiens

<400> 18

Asn Pro Val Ile Tyr Ala Tyr Phe Asn Lys Asp Phe Gln Asn Ala Phe
 1 5 10 15
 Lys Lys Ile Ile Lys Cys Lys Phe
 20

<210> 19

<211> 26

<212> PRT

<213> Homo sapiens

<400> 19

Asn Pro Ile Ile Tyr Thr Met Ser Asn Glu Asp Phe Lys Gln Ala Phe
 1 5 10 15
 His Lys Leu Ile Arg Phe Lys Cys Thr Ser
 20 25

<210> 20

<211> 24

<212> PRT

<213> Homo sapiens

<400> 20

Asn Pro Leu Leu Tyr Thr Ser Phe Asn Glu Asp Phe Lys Leu Ala Phe
 1 5 10 15
 Lys Lys Leu Ile Arg Cys Arg Glu
 20

<210> 21

<211> 37

<212> PRT

<213> Homo sapiens

<400> 21

Asn Pro Ile Ile Tyr Cys Leu Arg Asn Gln Glu Val Lys Arg Ala Leu
 1 5 10 15
 Cys Cys Ile Leu His Leu Tyr Gln His Gln Asp Pro Asp Pro Lys Lys
 20 25 30
 Gly Ser Arg Asn Val
 35

<210> 22
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 22
 Asn Pro Leu Ile Tyr Thr Leu Arg Asn Met Glu Val Lys Gly Ala Leu
 1 5 10 15
 Arg Arg Leu Leu Gly Lys Gly Arg Glu Val Gly
 20 25

<210> 23
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 23
 Asn Pro Leu Phe Tyr Gly Phe Leu Gly Lys Lys Phe Lys Arg Tyr Phe
 1 5 10 15
 Leu Gln Leu Leu Lys Tyr Ile Pro Pro Lys Ala Lys Ser His Ser Asn
 20 25 30
 Leu Ser Thr Lys Met Ser Thr Leu Ser Tyr Arg Pro Ser Asp Asn Val
 35 40 45
 Ser Ser Ser Thr Lys Lys Pro Ala Pro Cys Phe Glu Val Glu
 50 55 60

<210> 24
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 24
 Asn Pro Phe Leu Tyr Cys Phe Val Gly Asn Arg Phe Gln Gln Lys Leu
 1 5 10 15
 Arg Ser Val Phe Arg Val Pro Ile Thr Trp Leu Gln Gly Lys Arg Glu
 20 25 30
 Ser Met Ser Cys Arg Lys Ser Ser Ser Leu Arg Glu Met Glu Thr Phe
 35 40 45
 Val Ser
 50

<210> 25
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 25
 Asn Pro Leu Ile Tyr Ala Phe Ile Gly Gln Lys Phe Arg His Gly Leu
 1 5 10 15
 Leu Lys Ile Leu Ala Ile His Gly Leu Ser Lys Asp Ser Leu Pro Lys
 20 25 30
 Asp Ser Arg Pro Ser Phe Val Gly Ser Ser Ser Gly His Thr Ser Thr
 35 40 45
 Thr Leu
 50

<210> 26
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 26
 Asn Pro Leu Ile Tyr Ala Phe Ala Gly Glu Lys Phe Arg Arg Tyr Leu
 1 5 10 15
 Tyr His Leu Tyr Gly Lys Cys Leu Ala Val Leu Cys Gly Arg Ser Val
 20 25 30
 His Val Asp Phe Ser Ser Ser Glu Ser Gln Arg Ser Arg His Gly Ser
 35 40 45
 Val Leu Ser Ser Asn Phe Thr Tyr His Thr Ser Asp Gly Asp Ala Leu
 50 55 60
 Leu Leu Leu
 65

<210> 27
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 27
 Asn Pro Ile Leu Tyr Asn Leu Val Ser Ala Asn Phe Arg His Ile Phe
 1 5 10 15
 Leu Ala Thr Leu Ala Cys Leu Cys Pro Val Trp Arg Arg Arg Lys
 20 25 30
 Arg Pro Ala Phe Ser Arg Lys Ala Asp Ser Val Ser Ser Asn His Thr
 35 40 45
 Leu Ser Ser Asn Ala Thr Arg Glu Thr Leu Tyr
 50 55

<210> 28
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 28
 Asn Pro Ile Ile Tyr Cys Cys Leu Asn Asp Arg Phe Arg Leu Gly Phe
 1 5 10 15
 Lys His Ala Phe Arg Cys Cys Pro Phe Ile Ser Ala Gly Asp Tyr Glu
 20 25 30
 Gly Leu Glu Met Lys Ser Thr Arg Tyr Leu Gln Thr Gln Gly Ser Val
 35 40 45
 Tyr Lys Val Ser Arg Leu Glu Thr Thr Ile Ser Thr Val Val Gly Ala
 50 55 60
 His Glu Glu Glu Pro Glu Asp Gly Pro Lys Ala Thr Pro Ser Ser Leu
 65 70 75 80
 Asp Leu Thr Ser Asn Cys Ser Ser Arg Ser Asp Ser Lys Thr Met Thr
 85 90 95
 Glu Ser Phe Ser Phe Ser Ser Asn Val Leu Ser
 100 105

<210> 29
 <211> 51
 <212> PRT

<213> Homo sapiens

<400> 29

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Asn Pro Trp Ile Tyr Ala Ser Phe Ser Ser Ser Val Ser Ser Glu Leu
 1           5           10           15
Arg Ser Leu Leu Cys Cys Ala Arg Gly Arg Thr Pro Pro Ser Leu Gly
          20           25           30
Pro Gln Asp Glu Ser Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys Asp
          35           40           45
Thr Ser Ser
          50

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<210> 30

<211> 83

<212> PRT

<213> Homo sapiens

<400> 30

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Asn Pro Val Ile Tyr Asn Leu Met Ser Gln Lys Phe Arg Ala Ala Phe
 1           5           10           15
Arg Lys Leu Cys Asn Cys Lys Gln Lys Pro Thr Glu Lys Pro Ala Asn
          20           25           30
Tyr Ser Val Ala Leu Asn Tyr Ser Val Ile Lys Glu Ser Asp His Phe
          35           40           45
Ser Thr Glu Leu Asp Asp Ile Thr Val Thr Asp Thr Tyr Leu Ser Ala
          50           55           60
Thr Lys Val Ser Phe Asp Asp Thr Cys Leu Ala Ser Glu Val Ser Phe
          65           70           75           80
Ser Gln Ser

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<210> 31

<211> 65

<212> PRT

<213> Homo sapiens

<400> 31

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Asn Pro Trp Ile Tyr Met Leu Phe Thr Gly His Leu Phe His Glu Leu
 1           5           10           15
Val Gln Arg Phe Leu Cys Cys Ser Ala Ser Tyr Leu Lys Gly Arg Arg
          20           25           30
Leu Gly Glu Thr Ser Ala Ser Lys Lys Ser Asn Ser Ser Ser Phe Val
          35           40           45
Leu Ser His Arg Ser Ser Ser Gln Arg Ser Cys Ser Gln Pro Ser Thr
          50           55           60
Ala
65

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<210> 32

<211> 75

<212> PRT

<213> Homo sapiens

<400> 32

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Asn Pro Val Leu Tyr Ser Leu Met Ser Ser Arg Phe Arg Glu Thr Phe
 1           5           10           15

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Gln Glu Ala Leu Cys Leu Gly Ala Cys Cys His Arg Leu Arg Pro Arg
 20 25 30
 His Ser Ser His Ser Leu Ser Arg Met Thr Thr Gly Ser Thr Leu Cys
 35 40 45
 Asp Val Gly Ser Leu Gly Ser Trp Val His Pro Leu Ala Gly Asn Asp
 50 55 60
 Gly Pro Glu Ala Gln Gln Glu Thr Asp Pro Ser
 65 70 75

<210> 33
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 33
 Asn Pro Leu Val Tyr Cys Phe Met His Arg Arg Phe Arg Gln Ala Cys
 1 5 10 15
 Leu Glu Thr Cys Ala Arg Cys Cys Pro Arg Pro Pro Arg Ala Arg Pro
 20 25 30
 Arg Ala Leu Pro Asp Glu Asp Pro Pro Thr Pro Ser Ile Ala Ser Leu
 35 40 45
 Ser Arg Leu Ser Tyr Thr Thr Ile Ser Phe Leu Gly Pro Gly
 50 55 60

<210> 34
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 34
 Asn Pro Leu Val Tyr Ala Leu Ala Ser Arg His Phe Arg Ala Arg Phe
 1 5 10 15
 Arg Arg Leu Trp Pro Cys Gly Arg Arg Arg Arg His Arg Ala Arg Arg
 20 25 30
 Ala Leu Arg Arg Val Arg Pro Ala Ser Ser Gly Pro Pro Gly Cys Pro
 35 40 45
 Gly Asp Ala Arg Pro Ser Gly Arg Leu Leu Ala Gly Gly Gly Gln Gly
 50 55 60
 Pro Glu Pro Arg Glu Gly Pro Val His Gly Gly Glu Ala Ala Arg Gly
 65 70 75 80
 Pro Glu

<210> 35
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 35
 Asn Pro Ile Ile Tyr Thr Leu Thr Asn Lys Glu Met Arg Arg Ala Phe
 1 5 10 15
 Ile Arg Ile Met Ser Cys Cys Lys Cys Pro Ser Gly Asp Ser Ala Gly
 20 25 30
 Lys Phe Lys Arg Pro Ile Ile Ala Gly Met Glu Phe Ser Arg Ser Lys
 35 40 45
 Ser Asp Asn Ser Ser His Pro Gln Lys Asp Glu Gly Asp Asn Pro Glu

50 55 60
 Thr Ile Met Ser Ser Gly Asn Val Asn Ser Ser Ser
 65 70 75

<210> 36
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 36
 Asn Pro Ile Ile Tyr Ala Leu Arg Ser Lys Asp Leu Arg His Ala Phe
 1 5 10 15
 Arg Ser Met Phe Pro Ser Cys Glu Gly Thr Ala Gln Pro Leu Asp Asn
 20 25 30
 Ser Met Gly Asp Ser Asp Cys Leu His Lys His Ala Asn Asn Ala Ala
 35 40 45
 Ser Val His Arg Ala Ala Glu Ser Cys Ile Lys Ser Thr Val Lys Ile
 50 55 60
 Ala Lys Val Thr Met Ser Val Ser Thr Asp Thr Ser Ala Glu Ala Leu
 65 70 75 80

<210> 37
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 37
 Asn Pro Val Leu Tyr Ala Phe Leu Asp Glu Asn Phe Lys Arg Cys Phe
 1 5 10 15
 Arg Gln Leu Cys Arg Lys Pro Cys Gly Arg Pro Asp Pro Ser Ser Phe
 20 25 30
 Ser Arg Pro Arg Glu Ala Thr Ala Arg Glu Arg Val Thr Ala Cys Thr
 35 40 45
 Pro Ser Asp Gly Pro Gly Gly Gly Arg Ala Ala
 50 55

<210> 38
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 38
 Asp Pro Phe Val Tyr Tyr Phe Val Ser His Asp Phe Arg Asp His Ala
 1 5 10 15
 Lys Asn Ala Leu Leu Cys Arg Ser Val Arg Thr Val Lys Gln Met Gln
 20 25 30
 Val Ser Leu Thr Ser Lys Lys His Ser Arg Lys Ser Ser Ser Tyr Ser
 35 40 45
 Ser Ser Ser Thr Thr Val Lys Thr Ser Tyr
 50 55

<210> 39
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 39

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Asn Gly Glu Val Gln Ala Glu Leu Arg Arg Lys Trp Arg Arg Trp His
 1           5           10           15
Leu Gln Gly Val Leu Gly Trp Ser Ser Lys Ser Gln His Pro Trp Gly
           20           25           30
Gly Ser Asn Gly Ala Thr Cys Ser Thr Gln Val Ser Met Leu Thr Arg
           35           40           45
Val Ser Pro Ser Ala Arg Arg Ser Ser Ser Phe Gln Ala Glu Val Ser
           50           55           60
Leu Val
65

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<210> 40

<211> 371

<212> PRT

<213> Homo sapiens

<400> 40

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Met Leu Met Ala Ser Thr Thr Ser Ala Val Pro Gly His Pro Ser Leu
 1           5           10           15
Pro Ser Leu Pro Ser Asn Ser Ser Gln Glu Arg Pro Leu Asp Thr Arg
           20           25           30
Asp Pro Leu Leu Ala Arg Ala Glu Leu Ala Leu Leu Ser Ile Val Phe
           35           40           45
Val Ala Val Ala Leu Ser Asn Gly Leu Val Leu Ala Ala Leu Ala Arg
           50           55           60
Arg Gly Arg Arg Gly His Trp Ala Pro Ile His Val Phe Ile Gly His
65           70           75           80
Leu Cys Leu Ala Asp Leu Ala Val Ala Leu Phe Gln Val Leu Pro Gln
           85           90           95
Leu Ala Trp Lys Ala Thr Asp Arg Phe Arg Gly Pro Asp Ala Leu Cys
           100          105          110
Arg Ala Val Lys Tyr Leu Gln Met Val Gly Met Tyr Ala Ser Ser Tyr
           115          120          125
Met Ile Leu Ala Met Thr Leu Asp Arg His Arg Ala Ile Cys Arg Pro
           130          135          140
Met Leu Ala Tyr Arg His Gly Ser Gly Ala His Trp Asn Arg Pro Val
145          150          155          160
Leu Val Ala Trp Ala Phe Ser Leu Leu Leu Ser Leu Pro Gln Leu Phe
           165          170          175
Ile Phe Ala Gln Arg Asn Val Glu Gly Gly Ser Gly Val Thr Asp Cys
           180          185          190
Trp Ala Cys Phe Ala Glu Pro Trp Gly Arg Arg Thr Tyr Val Thr Trp
           195          200          205
Ile Ala Leu Met Val Phe Val Ala Pro Thr Leu Gly Ile Ala Ala Cys
           210          215          220
Gln Val Leu Ile Phe Arg Glu Ile His Ala Ser Leu Val Pro Gly Pro
225          230          235          240
Ser Glu Arg Pro Gly Gly Arg Arg Arg Gly Arg Arg Thr Gly Ser Pro
           245          250          255
Gly Glu Gly Ala His Val Ser Ala Ala Val Ala Lys Thr Val Arg Met
           260          265          270
Thr Leu Val Ile Val Val Val Tyr Val Leu Cys Trp Ala Pro Phe Phe
           275          280          285
Leu Val Gln Leu Trp Ala Ala Trp Asp Pro Glu Ala Pro Leu Glu Gly
           290          295          300
Ala Pro Phe Val Leu Leu Met Leu Leu Ala Ser Leu Asn Ser Cys Thr
305          310          315          320

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Asn Pro Trp Ile Tyr Ala Ser Phe Ser Ser Ser Val Ser Ser Glu Leu
 325 330 335
 Arg Ser Leu Leu Cys Cys Ala Arg Gly Arg Thr Pro Pro Ser Leu Gly
 340 345 350
 Pro Gln Asp Glu Ser Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys Asp
 355 360 365
 Thr Ser Ser
 370

<210> 41
 <211> 515
 <212> PRT
 <213> Golden hamster

<400> 41
 Met Asn Pro Asp Leu Asp Thr Gly His Asn Thr Ser Ala Pro Ala Gln
 1 5 10 15
 Trp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn Gln Thr Ser
 20 25 30
 Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val
 35 40 45
 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile
 50 55 60
 Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr
 65 70 75 80
 Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe
 85 90 95
 Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val
 100 105 110
 Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys
 115 120 125
 Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp Glu Tyr
 130 135 140
 Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg
 145 150 155 160
 Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile
 165 170 175
 Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp
 180 185 190
 Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser
 195 200 205
 Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys
 210 215 220
 Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly
 225 230 235 240
 Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His
 245 250 255
 Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly
 260 265 270
 His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg
 275 280 285
 Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile
 290 295 300
 Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe
 305 310 315 320
 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu
 325 330 335
 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser

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      340      345      350
Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg
      355      360      365
Ser Gly Arg Arg Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr
      370      375      380
Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser
385      390      395      400
Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Gln
      405      410      415
Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly
      420      425      430
Ala Gln Pro Pro Leu Glu Leu Cys Ala Tyr Pro Glu Trp Lys Ser Gly
      435      440      445
Ala Leu Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp
      450      455      460
Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro
465      470      475      480
Gly Thr Glu Gly Asp Ala Ser Asn Gly Gly Cys Asp Ala Thr Thr Asp
      485      490      495
Leu Ala Asn Gly Gln Pro Gly Phe Lys Ser Asn Met Pro Leu Ala Pro
      500      505      510
Gly His Phe
      515

```

<210> 42
 <211> 515
 <212> PRT
 <213> Golden hamster

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<400> 42
Met Asn Pro Asp Leu Asp Thr Gly His Asn Thr Ser Ala Pro Ala Gln
 1      5      10      15
Trp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn Gln Thr Ser
      20      25      30
Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val
      35      40      45
Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile
      50      55      60
Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr
      65      70      75      80
Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe
      85      90      95
Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val
      100      105      110
Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys
      115      120      125
Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp Ala Tyr
      130      135      140
Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg
      145      150      155      160
Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile
      165      170      175
Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp
      180      185      190
Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser
      195      200      205
Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys
      210      215      220

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Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly
 225 230 235 240
 Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His
 245 250 255
 Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly
 260 265 270
 His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg
 275 280 285
 Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile
 290 295 300
 Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe
 305 310 315 320
 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu
 325 330 335
 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser
 340 345 350
 Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg
 355 360 365
 Ser Gly Arg Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr
 370 375 380
 Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser
 385 390 395 400
 Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Gln
 405 410 415
 Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly
 420 425 430
 Ala Gln Pro Pro Leu Glu Leu Cys Ala Tyr Pro Glu Trp Lys Ser Gly
 435 440 445
 Ala Leu Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp
 450 455 460
 Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro
 465 470 475 480
 Gly Thr Glu Gly Asp Ala Ser Asn Gly Gly Cys Asp Ala Thr Thr Asp
 485 490 495
 Leu Ala Asn Gly Gln Pro Gly Phe Lys Ser Asn Met Pro Leu Ala Pro
 500 505 510
 Gly His Phe
 515

<210> 43

<211> 515

<212> PRT

<213> Golden hamster

<400> 43

Met Asn Pro Asp Leu Asp Thr Gly His Asn Thr Ser Ala Pro Ala Gln
 1 5 10 15
 Trp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn Gln Thr Ser
 20 25 30
 Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val
 35 40 45
 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile
 50 55 60
 Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr
 65 70 75 80
 Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe
 85 90 95
 Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val

100	105	110
Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys		
115	120	125
Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp His Tyr		
130	135	140
Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg		
145	150	155
Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile		
165	170	175
Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp		
180	185	190
Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser		
195	200	205
Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys		
210	215	220
Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly		
225	230	235
Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His		
245	250	255
Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly		
260	265	270
His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg		
275	280	285
Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile		
290	295	300
Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe		
305	310	315
Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu		
325	330	335
Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser		
340	345	350
Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg		
355	360	365
Ser Gly Arg Arg Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr		
370	375	380
Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser		
385	390	395
Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Gln		
405	410	415
Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly		
420	425	430
Ala Gln Pro Pro Leu Glu Leu Cys Ala Tyr Pro Glu Trp Lys Ser Gly		
435	440	445
Ala Leu Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp		
450	455	460
Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro		
465	470	475
Gly Thr Glu Gly Asp Ala Ser Asn Gly Gly Cys Asp Ala Thr Thr Asp		
485	490	495
Leu Ala Asn Gly Gln Pro Gly Phe Lys Ser Asn Met Pro Leu Ala Pro		
500	505	510
Gly His Phe		
515		

<210> 44
 <211> 515
 <212> PRT
 <213> Golden hamster

<400> 44

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Met Asn Pro Asp Leu Asp Thr Gly His Asn Thr Ser Ala Pro Ala Gln
 1          5          10          15
Trp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn Gln Thr Ser
          20          25          30
Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val
          35          40          45
Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile
          50          55          60
Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr
65          70          75          80
Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe
          85          90          95
Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val
          100          105          110
Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys
          115          120          125
Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp Asn Tyr
          130          135          140
Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg
145          150          155          160
Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile
          165          170          175
Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp
          180          185          190
Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser
          195          200          205
Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys
          210          215          220
Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly
225          230          235          240
Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His
          245          250          255
Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly
          260          265          270
His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg
          275          280          285
Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile
          290          295          300
Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe
305          310          315          320
Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu
          325          330          335
Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser
          340          345          350
Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg
          355          360          365
Ser Gly Arg Arg Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr
          370          375          380
Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser
385          390          395          400
Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Gln
          405          410          415
Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly
          420          425          430
Ala Gln Pro Pro Leu Glu Leu Cys Ala Tyr Pro Glu Trp Lys Ser Gly
          435          440          445
Ala Leu Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp
          450          455          460

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Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro
 465 470 475 480
 Gly Thr Glu Gly Asp Ala Ser Asn Gly Gly Cys Asp Ala Thr Thr Asp
 485 490 495
 Leu Ala Asn Gly Gln Pro Gly Phe Lys Ser Asn Met Pro Leu Ala Pro
 500 505 510
 Gly His Phe
 515

<210> 45
 <211> 359
 <212> PRT
 <213> Rattus norvegicus

<400> 45
 Met Ala Leu Asn Ser Ser Ala Glu Asp Gly Ile Lys Arg Ile Gln Asp
 1 5 10 15
 Asp Cys Pro Lys Ala Gly Arg His Ser Tyr Ile Phe Val Met Ile Pro
 20 25 30
 Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu
 35 40 45
 Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser
 50 55 60
 Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr
 65 70 75 80
 Cys Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe
 85 90 95
 Gly Asn His Leu Cys Lys Ile Ala Ser Ala Ser Val Thr Phe Asn Leu
 100 105 110
 Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu
 115 120 125
 Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val
 130 135 140
 Ala Lys Val Thr Cys Ile Ile Ile Trp Leu Met Ala Gly Leu Ala Ser
 145 150 155 160
 Leu Pro Ala Val Ile His Arg Asn Val Tyr Phe Ile Glu Asn Thr Asn
 165 170 175
 Ile Thr Val Cys Ala Phe His Tyr Glu Ser Arg Asn Ser Thr Leu Pro
 180 185 190
 Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe
 195 200 205
 Leu Ile Ile Leu Thr Ser Tyr Thr Leu Ile Trp Lys Ala Leu Lys Lys
 210 215 220
 Ala Tyr Glu Ile Gln Lys Asn Lys Pro Arg Asn Asp Asp Ile Phe Arg
 225 230 235 240
 Ile Ile Met Ala Ile Val Leu Phe Phe Phe Phe Ser Trp Val Pro His
 245 250 255
 Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Val Ile His
 260 265 270
 Asp Cys Lys Ile Ser Asp Ile Val Asp Thr Ala Met Pro Ile Thr Ile
 275 280 285
 Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe
 290 295 300
 Leu Gly Lys Lys Phe Lys Lys Tyr Phe Leu Gln Leu Leu Lys Tyr Ile
 305 310 315 320
 Pro Pro Lys Ala Lys Ser His Ser Ser Leu Ser Thr Lys Met Ser Thr
 325 330 335
 Leu Ser Tyr Arg Pro Ser Asp Asn Met Ser Ser Ser Ala Lys Lys Pro

Ala Ser Cys Phe Glu Val Glu
355

345

350

<210> 46
<211> 346
<212> PRT
<213> Homo sapiens

<400> 46
Met Met Trp Gly Ala Gly Ser Pro Leu Ala Trp Leu Ser Ala Gly Ser
1 5 10 15
Gly Asn Val Asn Val Ser Ser Val Gly Pro Ala Glu Gly Pro Thr Gly
20 25 30
Pro Ala Ala Pro Leu Pro Ser Pro Lys Ala Trp Asp Val Val Leu Cys
35 40 45
Ile Ser Gly Thr Leu Val Ser Cys Glu Asn Ala Leu Val Val Ala Ile
50 55 60
Ile Val Gly Thr Pro Ala Phe Arg Ala Pro Met Phe Leu Leu Val Gly
65 70 75 80
Ser Leu Ala Val Ala Asp Leu Leu Ala Gly Leu Gly Leu Val Leu His
85 90 95
Phe Ala Ala Val Phe Cys Ile Gly Ser Ala Glu Met Ser Leu Val Leu
100 105 110
Val Gly Val Leu Ala Met Ala Phe Thr Ala Ser Ile Gly Ser Leu Leu
115 120 125
Ala Ile Thr Val Asp Arg Tyr Leu Ser Leu Tyr Asn Ala Leu Thr Tyr
130 135 140
Tyr Ser Glu Thr Thr Val Thr Arg Thr Tyr Val Met Leu Ala Leu Val
145 150 155 160
Trp Gly Gly Ala Leu Gly Leu Gly Leu Leu Pro Val Leu Ala Trp Asn
165 170 175
Cys Leu Asp Gly Leu Thr Thr Cys Gly Val Val Tyr Pro Leu Ser Lys
180 185 190
Asn His Leu Val Val Leu Ala Ile Ala Phe Phe Met Val Phe Gly Ile
195 200 205
Met Leu Gln Leu Tyr Ala Gln Ile Cys Arg Ile Val Cys Arg His Ala
210 215 220
Gln Gln Ile Ala Leu Gln Arg His Leu Leu Pro Ala Ser His Tyr Val
225 230 235 240
Ala Thr Arg Lys Gly Ile Ala Thr Leu Ala Val Val Leu Gly Ala Phe
245 250 255
Ala Ala Cys Trp Leu Pro Phe Thr Val Tyr Cys Leu Leu Gly Asp Ala
260 265 270
His Ser Pro Pro Leu Tyr Thr Tyr Leu Thr Leu Leu Pro Ala Thr Tyr
275 280 285
Asn Ser Met Ile Asn Pro Ile Ile Tyr Ala Phe Arg Asn Gln Asp Val
290 295 300
Gln Lys Val Leu Trp Ala Val Cys Cys Cys Cys Ala Ala Ala Arg Gly
305 310 315 320
Arg Thr Pro Pro Ser Leu Gly Pro Gln Asp Glu Ser Cys Thr Thr Ala
325 330 335
Ser Ser Ser Leu Ala Lys Asp Thr Ser Ser
340 345

<210> 47
<211> 1041

<212> DNA
 <213> Homo sapiens

<400> 47
 atgatgtggg gtgcaggcag ccctctggcc tggctctcag ctggctcagg caacgtgaat 60
 gtaagcagcg tgggcccagc agaggggccc acaggtccag ccgcaccact gccctcgct 120
 aaggcctggg atgtggtgct ctgcatctca ggcaccctgg tgcctgcca gaatgcgcta 180
 gtggtggcca tcatcgtggg cactcctgcc ttccgtgccc ccattgttct gctggtgggc 240
 agcctggccg tggcagacct gctggcaggc ctgggcctgg tcttgacctt tgctgctgtc 300
 ttctgcatcg gtcagcggga gatgagcctg gtgctggttg gcgtgctggc aatggccttt 360
 acyggcagca tcggcagtct actggccatc actgtcgacc gctacctttc tctgtacaat 420
 gccctcacct actattcaga gacaacagtg acacggacct atgtgatgct ggccttagtg 480
 tggggagggtg ccctgggcct ggggctgctg cctgtgctgg cctggaactg cctggatggc 540
 ctgaccacat gtggcgtggt ttatccactc tccaagaacc atctggtagt tctggccatt 600
 gccttcttca tgggtgtttg catcatgctg cagctctacg cccaaatctg ccgcctcgctc 660
 tgccgcctatg ccagcagat tgcccttcag cggcacctgc tgcctgcctc ccactatgtg 720
 gccacccgca agggcattgc cacactggcc gtggtgcttg gagcctttgc cgcctgctgg 780
 ttgcccttca ctgtctactg cctgctgggt gatgccact ctccacctct ctacacctat 840
 cttaccttgc tccctgccac ctacaactcc atgatcaacc ctatcatcta cgccttccgc 900
 aaccaggatg tgcagaaagt gctgtgggct gtctgctgct gctgtgcggc cgcacgggga 960
 cgcacccac ccagcctggg tccccaagat gagtcctgca ccaccgccag ctctccctg 1020
 gcccaaggaca cttcatcgtg a 1041

<210> 48
 <211> 378
 <212> PRT
 <213> Homo sapiens

<400> 48
 Met Asn Ala Ser Ala Ala Ser Leu Asn Asp Ser Gln Val Val Val Val
 1 5 10 15
 Ala Ala Glu Gly Ala Ala Ala Ala Thr Ala Ala Gly Gly Pro Asp
 20 25 30
 Thr Gly Glu Trp Gly Pro Pro Ala Ala Ala Leu Gly Ala Gly Gly
 35 40 45
 Gly Ala Asn Gly Ser Leu Glu Leu Ser Ser Gln Leu Ser Ala Gly Pro
 50 55 60
 Pro Gly Leu Leu Leu Pro Ala Val Asn Pro Trp Asp Val Leu Leu Cys
 65 70 75 80
 Val Ser Gly Thr Val Ile Ala Gly Glu Asn Ala Leu Val Val Ala Leu
 85 90 95
 Ile Ala Ser Thr Pro Ala Leu Arg Thr Pro Met Phe Val Leu Val Gly
 100 105 110
 Ser Leu Ala Thr Ala Asp Leu Leu Ala Gly Cys Gly Leu Ile Leu His
 115 120 125
 Phe Val Phe Gln Tyr Leu Val Pro Ser Glu Thr Val Ser Leu Leu Thr
 130 135 140
 Val Gly Phe Leu Val Ala Ser Phe Ala Ala Ser Val Ser Ser Leu Leu
 145 150 155 160
 Ala Ile Thr Val Asp Arg Tyr Leu Ser Leu Tyr Asn Ala Leu Thr Tyr
 165 170 175
 Tyr Ser Arg Arg Thr Leu Leu Gly Val His Leu Leu Leu Ala Ala Thr
 180 185 190
 Trp Thr Val Ser Leu Gly Leu Gly Leu Leu Pro Val Leu Gly Trp Asn
 195 200 205
 Cys Leu Ala Glu Arg Ala Ala Cys Ser Val Val Arg Pro Leu Ala Arg
 210 215 220
 Ser His Val Ala Leu Leu Ser Ala Ala Phe Phe Met Val Phe Gly Ile
 225 230 235 240

Met Leu His Leu Tyr Val Arg Ile Cys Gln Val Val Trp Arg His Ala
 245 250 255
 His Gln Ile Ala Leu Gln Gln His Cys Leu Ala Pro Pro His Leu Ala
 260 265 270
 Ala Thr Arg Lys Gly Val Gly Thr Leu Ala Val Val Leu Gly Thr Phe
 275 280 285
 Gly Ala Ser Trp Leu Pro Phe Ala Ile Tyr Cys Val Val Gly Ser His
 290 295 300
 Glu Asp Pro Ala Val Tyr Thr Tyr Ala Thr Leu Leu Pro Ala Thr Tyr
 305 310 315 320
 Asn Ser Met Ile Asn Pro Ile Ile Tyr Ala Phe Arg Asn Gln Glu Ile
 325 330 335
 Gln Arg Ala Leu Trp Leu Leu Leu Cys Gly Cys Ala Ala Ala Arg Gly
 340 345 350
 Arg Thr Pro Pro Ser Leu Gly Pro Gln Asp Glu Ser Cys Thr Thr Ala
 355 360 365
 Ser Ser Ser Leu Ala Lys Asp Thr Ser Ser
 370 375

<210> 49
 <211> 1137
 <212> DNA
 <213> Homo sapiens

<400> 49
 atgaacgcga gcgcccgcctc gctcaacgac tcccaggtgg tggtagtggc ggccgaagga 60
 gcggcggcgg cggccacagc agcagggggg ccggacacgg gcgaatgggg accccctgct 120
 gcggcggcctc taggagccgg cggcgaggct aatgggtctc tggagctgtc ctgcgagctg 180
 tcggctgggc caccgggact cctgctgcca gcggtgaatc cgtgggacgt gctcctgtgc 240
 gtgtcgggga cagtgatcgc tggagaaaac gcgctgggtg tggcgctcat cgcgtccact 300
 ccggcgctgc gcacgcccac gttcgtgctg gtaggcagcc tggccaccgc tgacctgttg 360
 gcgggctgtg gcctcatctt gcactttgtg ttccagtact tggtgccctc ggagactgtg 420
 agtctgtctc cgggtgggctt cctcgtggcc tccctgcgcg cctctgtcag cagcctgctg 480
 gccattacgg tggaccgcta cctgtccctg tataacgcgc tcacctatta ctgcgcgccg 540
 accctgttgg gcgtgcacct cctgcttgcc gccacttggc ccgtgtccct aggcctgggg 600
 ctgctgcccg tgctgggctg gaactgcctg gcagagcgcg ccgcctgcag cgtggtgcgc 660
 ccgctggcgc gcagccacgt ggctctgtc tccgcgcct tcttcatggg cttcggcatc 720
 atgctgcacc tgtacgtgcg catctgccag gtggtctggc gccacgcgca ccagatcgcg 780
 ctgcagcagc actgcctggc gccaccccat ctgcgtgcca ccagaaaggg tgtgggtaca 840
 ctggctgtgg tgctgggcac ttctggcgcc agctggctgc ccttcgccat ctattgcgtg 900
 gtgggcagcc atgaggaccc ggcggtctac acttacgcca cctgctgcc cgccacctac 960
 aactccatga tcaatcccat catctatgcc ttccgcaacc aggagatcca gcgcgcctg 1020
 tggctcctgc tctgtggctg tgcggccgca cggggacgca cccacccag cctgggtccc 1080
 caagatgagt cctgcaccac cgcagctcc tccctggcca aggacacttc atcgtga 1137

<210> 50
 <211> 350
 <212> PRT
 <213> Homo sapiens

<400> 50
 Met Asn Glu Asp Leu Lys Val Asn Leu Ser Gly Leu Pro Arg Asp Tyr
 1 5 10 15
 Leu Asp Ala Ala Ala Ala Glu Asn Ile Ser Ala Ala Val Ser Ser Arg
 20 25 30
 Val Pro Ala Val Glu Pro Glu Pro Glu Leu Val Val Asn Pro Trp Asp
 35 40 45
 Ile Val Leu Cys Thr Ser Gly Thr Leu Ile Ser Cys Glu Asn Ala Ile

50	55	60
Val Val Leu Ile Ile Phe His Asn Pro Ser Leu Arg Ala Pro Met Phe		
65	70	75
Leu Leu Ile Gly Ser Leu Ala Leu Ala Asp Leu Leu Ala Gly Ile Gly		80
	85	90
Leu Ile Thr Asn Phe Val Phe Ala Tyr Leu Leu Gln Ser Glu Ala Thr		95
	100	105
Lys Leu Val Thr Ile Gly Leu Ile Val Ala Ser Phe Ser Ala Ser Val		110
	115	120
Cys Ser Leu Leu Ala Ile Thr Val Asp Arg Tyr Leu Ser Leu Tyr Tyr		125
	130	135
Ala Leu Thr Tyr His Ser Glu Arg Thr Val Thr Phe Thr Tyr Val Met		140
145	150	155
Leu Val Met Leu Trp Gly Thr Ser Ile Cys Leu Gly Leu Leu Pro Val		160
	165	170
Met Gly Trp Asn Cys Leu Arg Asp Glu Ser Thr Cys Ser Val Val Arg		175
	180	185
Pro Leu Thr Lys Asn Asn Ala Ala Ile Leu Ser Val Ser Phe Leu Phe		190
	195	200
Met Phe Ala Leu Met Leu Gln Leu Tyr Ile Gln Ile Cys Lys Ile Val		205
	210	215
Met Arg His Ala His Gln Ile Ala Leu Gln His His Phe Leu Ala Thr		220
225	230	235
Ser His Tyr Val Thr Thr Arg Lys Gly Val Ser Thr Leu Ala Ile Ile		240
	245	250
Leu Gly Thr Phe Ala Ala Cys Trp Met Pro Phe Thr Leu Tyr Ser Leu		255
	260	265
Ile Ala Asp Tyr Thr Tyr Pro Ser Ile Tyr Thr Tyr Ala Thr Leu Leu		270
	275	280
Pro Ala Thr Tyr Asn Ser Ile Ile Asn Pro Val Ile Tyr Ala Phe Arg		285
	290	295
Asn Gln Glu Ile Gln Lys Ala Leu Cys Leu Ile Cys Cys Gly Cys Ala		300
305	310	315
Ala Ala Arg Gly Arg Thr Pro Pro Ser Leu Gly Pro Gln Asp Glu Ser		320
	325	330
Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys Asp Thr Ser Ser		335
	340	345
		350

<210> 51
 <211> 1053
 <212> DNA
 <213> Homo sapiens

<400> 51
 atgaatgaag acctgaaggt caatttaagc gggctgcctc gggattatatt agatgccgct 60
 gctgcggaga acatctcggc tgcgtgtctcc tcccgggttc ctgccgtaga gccagagcct 120
 gagctcgtag tcaacccttg ggacattgtc ttgtgtacct cggaaccct catctcctgt 180
 gaaaatgccca ttgtggctcct tatcatcttc cacaaccoca gcctgcgagc acccatgttc 240
 ctgctaataag gcagcctggc tcttgccagac ctgctggccg gcattggact catcaccaat 300
 tttgtttttg cctacctgct tcagtcagaa gccaccaagc tggtcacgat cggcctcatt 360
 gtcgcctctt tctctgcctc tgtctgcagc ttgctggcta tcaactgttga ccgctacctc 420
 tcaactgtact acgctctgac gtaccattcg gagaggacgg tcacggttac ctatgtcatg 480
 ctgctcatgc tctgggggac ctccatctgc ctggggctgc tgcccgtcat gggctggaac 540
 tgcctccgag acgagtcac ctgcagcgtg gtcagaccgc tcaccaagaa caacgcggcc 600
 atcctctcgg tgtccttcct cttcatgttt gcgctcatgc ttcagctcta catccagatc 660
 tgtaagattg tgatgaggca cgcccatcag atagccctgc agcaccactt cctggccacg 720
 tcgcactatg tgaccacccg gaaaggggtc tccaccctgg ctatcatcct ggggacgttt 780
 gctgcttgct ggatgccttt caccctctat tccttgatag cggattacac ctaccctcc 840

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atctatacct acgccaccct cctgcccgcc acctacaatt ccatcatcaa cctgtcata 900
tatgctttca gaaaccaaga gatccagaaa gcgctctgtc tcatttgctg cggctgcgcg 960
gccgcacggg gacgcacccc acccagcctg ggcccccaag atgagtcctg caccaccgcc 1020
agctcctccc tggccaagga cacttcacgt tga 1053

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<210> 52
<211> 388
<212> PRT
<213> Homo sapiens

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<400> 52
Met Ala Asn Thr Thr Gly Glu Pro Glu Glu Val Ser Gly Ala Leu Ser
 1          5          10          15
Pro Pro Ser Ala Ser Ala Tyr Val Lys Leu Val Leu Leu Gly Leu Ile
 20          25          30
Met Cys Val Ser Leu Ala Gly Asn Ala Ile Leu Ser Leu Leu Val Leu
 35          40          45
Lys Glu Arg Ala Leu His Lys Ala Pro Tyr Tyr Phe Leu Leu Asp Leu
 50          55          60
Cys Leu Ala Asp Gly Ile Arg Ser Ala Val Cys Phe Pro Phe Val Leu
 65          70          75          80
Ala Ser Val Arg His Gly Ser Ser Trp Thr Phe Ser Ala Leu Ser Cys
 85          90          95
Lys Ile Val Ala Phe Met Ala Val Leu Phe Cys Phe His Ala Ala Phe
 100         105         110
Met Leu Phe Cys Ile Ser Val Thr Arg Tyr Met Ala Ile Ala His His
 115         120         125
Arg Phe Tyr Ala Lys Arg Met Thr Leu Trp Thr Cys Ala Ala Val Ile
 130         135         140
Cys Met Ala Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Phe
 145         150         155         160
Asp Val Gly Thr Tyr Lys Phe Ile Arg Glu Glu Asp Gln Cys Ile Phe
 165         170         175
Glu His Arg Tyr Phe Lys Ala Asn Asp Thr Leu Gly Phe Met Leu Met
 180         185         190
Leu Ala Val Leu Met Ala Ala Thr His Ala Val Tyr Gly Lys Leu Leu
 195         200         205
Leu Phe Glu Tyr Arg His Arg Lys Met Lys Pro Val Gln Met Val Pro
 210         215         220
Ala Ile Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln
 225         230         235         240
Ala Ala Ala Asn Trp Ile Ala Gly Phe Gly Arg Gly Pro Met Pro Pro
 245         250         255
Thr Leu Leu Gly Ile Arg Gln Asn Gly His Ala Ala Ser Arg Arg Leu
 260         265         270
Leu Gly Met Asp Glu Val Lys Gly Glu Lys Gln Leu Gly Arg Met Phe
 275         280         285
Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val
 290         295         300
Ala Cys Tyr Trp Arg Val Phe Val Lys Ala Cys Ala Val Pro His Arg
 305         310         315         320
Tyr Leu Ala Thr Ala Val Trp Met Ser Phe Ala Gln Ala Ala Val Asn
 325         330         335
Pro Ile Val Cys Phe Leu Leu Asn Lys Asp Leu Lys Lys Cys Leu Arg
 340         345         350
Thr His Ala Pro Cys Ala Ala Ala Arg Gly Arg Thr Pro Pro Ser Leu
 355         360         365
Gly Pro Gln Asp Glu Ser Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys
 370         375         380

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Asp Thr Ser Ser
385

<210> 53
<211> 1167
<212> DNA
<213> Homo sapiens

<400> 53
atggccaaca ctaccggaga gcctgaggag gtgagcggcg ctctgtcccc accgtccgca 60
tcagcttatg tgaagctggt actgctggga ctgattatgt gcgtgagcct ggcgggtaac 120
gccatcttgt ccctgctggt gctcaaggag cgtgccctgc acaaggctcc ttactacttc 180
ctgctggacc tgtgcctggc cgatggcata cgctctgcgc tctgcttccc ctttgtgctg 240
gcttctgtgc gccacggctc ttcattggacc ttcagtgcac tcagctgcaa gattgtggcc 300
tttatggcgc tgcctctttt cttccatgcg gccttcatgc tgttctgcat cagcgtcacc 360
cgctacatgg ccctgcgcca ccaccgcttc tacgccaagc gcatgacact ctggacatgc 420
gcggctgtca tctgcatggc ctggaccctg tctgtggcca tggccttccc acctgtcttt 480
gacgtgggca cctacaagtt tattcgggag gaggaccagt gcatctttga gcatcgctac 540
ttcaaggcca atgacacgct gggcttcatg cttatgttgg ctgtgctcat ggcagctacc 600
catgctgtct acggcaagct gctcctcttc gactatcgtc accgcaagat gaagccagtg 660
cagatggtgc cagccatcag ccagaactgg acattccatg gtcccggggc caccggccag 720
gctgctgcca actggatcgc cggctttggc cgtgggcccc tgccaccaac cctgctgggt 780
atccggcaga atgggcatgc agccagccgg cggctactgg gcatggacga ggtcaagggt 840
gaaaagcagc tgggcccgcg gttctacgcg atcacactgc tctttctgct cctctggtca 900
ccctacatcg tggcctgcta ctggcgagtg tttgtgaaag cctgtgctgt gccccaccgc 960
tacctggcca ctgctgtttg gatgagcttc gccaggctg ccgtcaaccc aattgtctgc 1020
ttcctgctca acaaggacct caagaagtgc ctgaggactc acgccccctg cgcgccgca 1080
cggggacgca cccacccag cctgggtccc caagatgagt cctgcaccac cgccagctcc 1140
tccttgcca aggacacttc atcgtga 1167

<210> 54
<211> 388
<212> PRT
<213> Homo sapiens

<400> 54
Met Ala Asn Tyr Ser His Ala Ala Asp Asn Ile Leu Gln Asn Leu Ser
1 5 10 15
Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Ile Gly
20 25 30
Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp
35 40 45
Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys
50 55 60
Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser
65 70 75 80
Val Lys Asn Gly Ser Thr Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val
85 90 95
Ile Ala Phe Leu Gly Val Leu Ser Cys Phe His Thr Ala Phe Met Leu
100 105 110
Phe Cys Ile Ser Val Thr Arg Tyr Leu Ala Ile Ala His His Arg Phe
115 120 125
Tyr Thr Lys Arg Leu Thr Phe Trp Thr Cys Leu Ala Val Ile Cys Met
130 135 140
Val Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Leu Asp Val
145 150 155 160
Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His
165 170 175

Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Leu Ala
 180 185 190
 Leu Ile Leu Leu Ala Thr Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe
 195 200 205
 Val His Asp Arg Arg Lys Met Lys Pro Val Gln Phe Val Ala Ala Val
 210 215 220
 Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Ser Gly Gln Ala Ala
 225 230 235 240
 Ala Asn Trp Leu Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu
 245 250 255
 Leu Gly Ile Arg Gln Asn Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu
 260 265 270
 Val Leu Asp Glu Phe Lys Met Glu Lys Arg Ile Ser Arg Met Phe Tyr
 275 280 285
 Ile Met Thr Phe Leu Phe Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala
 290 295 300
 Cys Tyr Trp Arg Val Phe Ala Arg Gly Pro Val Pro Gly Gly Phe
 305 310 315 320
 Leu Thr Ala Ala Val Trp Met Ser Phe Ala Gln Ala Gly Ile Asn Pro
 325 330 335
 Phe Val Cys Ile Phe Ser Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr
 340 345 350
 Thr Leu Leu Tyr Cys Ala Ala Ala Arg Gly Arg Thr Pro Pro Ser Leu
 355 360 365
 Gly Pro Gln Asp Glu Ser Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys
 370 375 380
 Asp Thr Ser Ser
 385

<210> 55
 <211> 1167
 <212> DNA
 <213> Homo sapiens

<400> 55
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 tttctgaaac tgacttcctt gggtttcata ataggagtca gcgtgggtggg caacctcctg 120
 atctccattt tgctagtgaag agataagacc ttgcatagag cacccttacta ctctcctgttg 180
 gatcttttgcgt gttcagatat cctcagatct gcaatttgtt tcccatttgcgt gttcaactct 240
 gtcaaaaatg gctctacctg gacttatggg actctgactt gcaaagtgat tgccttttctg 300
 ggggttttgcgt cctggtttcca cactgctttc atgctcttct gcatcagtgt caccagatac 360
 ttagctatcg cccatcaccg ctctctataca aagaggctga ccttttggac gtgtctggct 420
 gtgatctgta tgggtgtggac tctgtctgtg gccatggcat ttccccgggt tttagacgtg 480
 ggcaacttact cattcattag ggaggaagat caatgcacct tccaacaccg ctcttccagg 540
 gctaattgatt ccttaggatt tatgctgctt cttgctctca tcctcctagc cacacagctt 600
 gtctacctca agctgatatt tttcgtccac gatcgaagaa aaatgaagcc agtccagttt 660
 gtagcagcag tcagccagaa ctggactttt catggctcctg gagccagtgg ccaggcagct 720
 gccaatggc tagcaggatt tggaaggggt cccacaccac ccaccttgct gggcatcagg 780
 caaaatgcaa acaccacagg cagaagaagg ctatttggct tagacgagtt caaaatggag 840
 aaaagaatca gcagaatgtt ctatataatg acttttctgt ttctaacctt gtggggcccc 900
 tacctgggtg cctgttattg gagagttttt gcaagagggc ctgtagtacc aggggggattt 960
 ctaacagctg ctgtctggat gagttttgcc caagcaggaa tcaatcctt tgtctgcatt 1020
 ttctcaaaca gggagctgag gcgctgtttc agcacaaccc ttctttactg cgcggcgcga 1080
 cggggacgca cccacccag cctgggtccc caagatgagt cctgcaccac cgccagctcc 1140
 tccttgcca aggacacttc atcgtga 1167

<210> 56
 <211> 364

<212> PRT
 <213> Homo sapiens

<400> 56

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Met Gln Ala Ala Gly His Pro Glu Pro Leu Asp Ser Arg Gly Ser Phe
 1          5          10          15
Ser Leu Pro Thr Met Gly Ala Asn Val Ser Gln Asp Asn Gly Thr Gly
          20          25          30
His Asn Ala Thr Phe Ser Glu Pro Leu Pro Phe Leu Tyr Val Leu Leu
          35          40          45
Pro Ala Val Tyr Ser Gly Ile Cys Ala Val Gly Leu Thr Gly Asn Thr
          50          55          60
Ala Val Ile Leu Val Ile Leu Arg Ala Pro Lys Met Lys Thr Val Thr
65          70          75          80
Asn Val Phe Ile Leu Asn Leu Ala Val Ala Asp Gly Leu Phe Thr Leu
          85          90          95
Val Leu Pro Val Asn Ile Ala Glu His Leu Leu Gln Tyr Trp Pro Phe
          100          105          110
Gly Glu Leu Leu Cys Lys Leu Val Leu Ala Val Asp His Tyr Asn Ile
          115          120          125
Phe Ser Ser Ile Tyr Phe Leu Ala Val Met Ser Val Asp Arg Tyr Leu
          130          135          140
Val Val Leu Ala Thr Val Arg Ser Arg His Met Pro Trp Arg Thr Tyr
145          150          155          160
Arg Gly Ala Lys Val Ala Ser Leu Cys Val Trp Leu Gly Val Thr Val
          165          170          175
Leu Val Leu Pro Phe Phe Ser Phe Ala Gly Val Tyr Ser Asn Glu Leu
          180          185          190
Gln Val Pro Ser Cys Gly Leu Ser Phe Pro Trp Pro Glu Arg Val Trp
          195          200          205
Phe Lys Ala Ser Arg Val Tyr Thr Leu Val Leu Gly Phe Val Leu Pro
210          215          220
Val Cys Thr Ile Cys Val Leu Tyr Thr Asp Leu Leu Arg Arg Leu Arg
225          230          235          240
Ala Val Arg Leu Arg Ser Gly Ala Lys Ala Leu Gly Lys Ala Arg Arg
          245          250          255
Lys Val Thr Val Leu Val Leu Val Val Leu Ala Val Cys Leu Leu Cys
          260          265          270
Trp Thr Pro Phe His Leu Ala Ser Val Val Ala Leu Thr Thr Asp Leu
          275          280          285
Pro Gln Thr Pro Leu Val Ile Ser Met Ser Tyr Val Ile Thr Ser Leu
290          295          300
Ser Tyr Ala Asn Ser Cys Leu Asn Pro Phe Leu Tyr Ala Phe Leu Asp
305          310          315          320
Asp Asn Phe Arg Lys Asn Phe Arg Ser Ile Leu Arg Cys Ala Ala Ala
          325          330          335
Arg Gly Arg Thr Pro Pro Ser Leu Gly Pro Gln Asp Glu Ser Cys Thr
          340          345          350
Thr Ala Ser Ser Ser Leu Ala Lys Asp Thr Ser Ser
          355          360

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<210> 57
 <211> 1095
 <212> DNA
 <213> Homo sapiens

<400> 57

atgcaggccg ctgggcaccc agagcccctt gacagcaggg gctccttctc cctccccacg 60

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atgggtgccacgctctctca ggacaatggc actggccaca atgccacctt ctccgagcca 120
ctgccgttcc tctatgtgct cctgcccggc gtgtactccg ggatctgtgc tgtggggctg 180
actggcaaca cggcgtcat ccttgtaatc ctaagggcgc ccaagatgaa gacggtgacc 240
aacgtgttca tctgaacct ggccgtcgcc gacgggctct tcacgctggt actgcccgtc 300
aacatcgctg agcacctgct gcagtactgg ccttcggggg agctgctctg caagctggtg 360
ctggccgtcg accactacaa catcttctcc agcatctact tcctagccgt gatgagcgtg 420
gaccgatacc tgggtggtgct ggccaccgtg aggtcccggc acatgccctg gcgcacctac 480
cggggggcga aggtcgccag cctgtgtgtc tggctgggcg tcacggtcct ggttctgccc 540
ttcttctctt tcgctggcgt ctacagcaac gagctgcagg tcccaagctg tgggctgagc 600
ttccgtggc ccgagcgggt ctggttcaag gccagccgtg tctacacttt ggtcctgggc 660
ttcgtgtgct ccgtgtgcac catctgtgtg ctctacacag acctcctgcg caggctgcgg 720
gccgtgcggc tccgctctgg agccaaggct ctaggcaagg ccaggcggaa ggtgaccgtc 780
ctggtcctcg tcgtgctggc cgtgtgcctc ctctgttgga cgcccttcca cctggcctct 840
gtcgtggccc tgaccacgga cctgccccag acccactgg tcctcagtat gtcctacgtc 900
atcaccagcc tcagctacgc caactcgtgc ctgaaccctt tcctctacgc ctttctagat 960
gacaacttcc ggaagaactt ccgcagcata ttgcggtgcg cggccgcacg gggacgcacc 1020
ccaccagcc tgggtcccca agatgagtcc tgcaccaccg ccagctcctc cctggccaag 1080
gacattcat cgtga 1095

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<210> 58
 <211> 419
 <212> PRT
 <213> Homo sapiens

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<400> 58
Met Cys Phe Ser Pro Ile Leu Glu Ile Asn Met Gln Ser Glu Ser Asn
1 5 10 15
Ile Thr Val Arg Asp Asp Ile Asp Asp Ile Asn Thr Asn Met Tyr Gln
20 25 30
Pro Leu Ser Tyr Pro Leu Ser Phe Gln Val Ser Leu Thr Gly Phe Leu
35 40 45
Met Leu Glu Ile Val Leu Gly Leu Gly Ser Asn Leu Thr Val Leu Val
50 55 60
Leu Tyr Cys Met Lys Ser Asn Leu Ile Asn Ser Val Ser Asn Ile Ile
65 70 75 80
Thr Met Asn Leu His Val Leu Asp Val Ile Ile Cys Val Gly Cys Ile
85 90 95
Pro Leu Thr Ile Val Ile Leu Leu Leu Ser Leu Glu Ser Asn Thr Ala
100 105 110
Leu Ile Cys Cys Phe His Glu Ala Cys Val Ser Phe Ala Ser Val Ser
115 120 125
Thr Ala Ile Asn Val Phe Ala Ile Thr Leu Asp Arg Tyr Asp Ile Ser
130 135 140
Val Lys Pro Ala Asn Arg Ile Leu Thr Met Gly Arg Ala Val Met Leu
145 150 155 160
Met Ile Ser Ile Trp Ile Phe Ser Phe Phe Ser Phe Leu Ile Pro Phe
165 170 175
Ile Glu Val Asn Phe Phe Ser Leu Gln Ser Gly Asn Thr Trp Glu Asn
180 185 190
Lys Thr Leu Leu Cys Val Ser Thr Asn Glu Tyr Tyr Thr Glu Leu Gly
195 200 205
Met Tyr Tyr His Leu Leu Val Gln Ile Pro Ile Phe Phe Phe Thr Val
210 215 220
Val Val Met Leu Ile Thr Tyr Thr Lys Ile Leu Gln Ala Leu Asn Ile
225 230 235 240
Arg Ile Gly Thr Arg Phe Ser Thr Gly Gln Lys Lys Lys Ala Arg Lys
245 250 255
Lys Lys Thr Ile Ser Leu Thr Thr Gln His Glu Ala Thr Asp Met Ser
260 265 270

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Gln Ser Ser Gly Gly Arg Asn Val Val Phe Gly Val Arg Thr Ser Val
 275 280 285
 Ser Val Ile Ile Ala Leu Arg Arg Ala Val Lys Arg His Arg Glu Arg
 290 295 300
 Arg Glu Arg Gln Lys Arg Val Phe Arg Met Ser Leu Leu Ile Ile Ser
 305 310 315 320
 Thr Phe Leu Leu Cys Trp Thr Pro Ile Ser Val Leu Asn Thr Thr Ile
 325 330 335
 Leu Cys Leu Gly Pro Ser Asp Leu Leu Val Lys Leu Arg Leu Cys Phe
 340 345 350
 Leu Val Met Ala Tyr Gly Thr Thr Ile Phe His Pro Leu Leu Tyr Ala
 355 360 365
 Phe Thr Arg Gln Lys Phe Gln Lys Val Leu Lys Ser Lys Met Lys Lys
 370 375 380
 Arg Val Val Cys Ala Ala Ala Arg Gly Arg Thr Pro Pro Ser Leu Gly
 385 390 395 400
 Pro Gln Asp Glu Ser Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys Asp
 405 410 415
 Thr Ser Ser

<210> 59
 <211> 1260
 <212> DNA
 <213> Homo sapiens

<400> 59
 atgtgttttt ctcccattct ggaaatcaac atgcagttctg aatctaacat tacagtgcga 60
 gatgacattg atgacatcaa caccaatatg taccaaccac tatcatatcc gtttagcttt 120
 caagtgtctc tcaccggatt tcttatgtta gaaattgtgt tgggacttgg cagcaacctc 180
 actgtattgg tactttactg catgaaatcc aacttaatca actctgtcag taacattatt 240
 acaatgaatc ttcatgtact tgatgtaata atttgtgtgg gatgtattcc tctaactata 300
 gttalccttc tgctttcact ggagagtaac actgctctca ttgtgtgttt ccatgaggct 360
 tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgctatcac ttggacaga 420
 tatgacatct ctgtaaaacc tgcaaaccga attctgacaa tgggcagagc tgtaattgta 480
 atgatatcca ttgggatttt ttcttttttc tctttcctga ttctttttat tgaggtaaat 540
 tttttcagtc ttcaaagtgg aaatacctgg gaaaacaaga cacttttatg tgtcagtaca 600
 aatgaatact aactgaact gggaatgtat tatcacctgt tagtacagat cccaatattc 660
 tttttcactg ttgtagtaat gttaatcaca tacacaaaaa tacttcaggc tcttaattatt 720
 cgaataggca caagattttc aacagggcag aagaagaaaag caagaaagaa aaagacaatt 780
 tctctaacca cacaacatga ggctacagac atgtcacaaa gcagtggtgg gagaaatgta 840
 gtctttggtg taagaacttc agtttctgta ataattgccc tccggcgagc tgtgaaacga 900
 caccgtgaac gacgagaaaag acaaaagaga gtcttcagga tgtctttatt gattatttct 960
 acatttcttc tctgctggac accaatttct gttttaaata ccaccatttt atgtttaggc 1020
 ccaagtgacc ttttagtaaa attaagattg tgttttttag tcatggctta tggaacaact 1080
 atatttcacc ctctattata tgcattcact agacaaaaat ttcaaaaggc cttgaaaagt 1140
 aaaatgaaaa agcgagttgt ttgtgcggcc gcacggggac gcacccacc cagcctgggt 1200
 cccaagatg agtctctgcac caccgccagc tctctcctgg ccaaggacac ttcactgtga 1260

<210> 60
 <211> 370
 <212> PRT
 <213> Homo sapiens

<400> 60
 Met Gly Gln Pro Gly Asn Gly Ser Ala Phe Leu Leu Ala Pro Asn Arg
 1 5 10 15

Ser His Ala Pro Asp His Asp Val Thr Gln Gln Arg Asp Glu Val Trp
 20 25 30
 Val Val Gly Met Gly Ile Val Met Ser Leu Ile Val Leu Ala Ile Val
 35 40 45
 Phe Gly Asn Val Leu Val Ile Thr Ala Ile Ala Lys Phe Glu Arg Leu
 50 55 60
 Gln Thr Val Thr Asn Tyr Phe Ile Thr Ser Leu Ala Cys Ala Asp Leu
 65 70 75 80
 Val Met Gly Leu Ala Val Val Pro Phe Gly Ala Ala His Ile Leu Met
 85 90 95
 Lys Met Trp Thr Phe Gly Asn Phe Trp Cys Glu Phe Trp Thr Ser Ile
 100 105 110
 Asp Val Leu Cys Val Thr Ala Ser Ile Glu Thr Leu Cys Val Ile Ala
 115 120 125
 Val Asp Arg Tyr Phe Ala Ile Thr Ser Pro Phe Lys Tyr Gln Ser Leu
 130 135 140
 Leu Thr Lys Asn Lys Ala Arg Val Ile Ile Leu Met Val Trp Ile Val
 145 150 155 160
 Ser Gly Leu Thr Ser Phe Leu Pro Ile Gln Met His Trp Tyr Arg Ala
 165 170 175
 Thr His Gln Glu Ala Ile Asn Cys Tyr Ala Asn Glu Thr Cys Cys Asp
 180 185 190
 Phe Phe Thr Asn Gln Ala Tyr Ala Ile Ala Ser Ser Ile Val Ser Phe
 195 200 205
 Tyr Val Pro Leu Val Ile Met Val Phe Val Tyr Ser Arg Val Phe Gln
 210 215 220
 Glu Ala Lys Arg Gln Leu Gln Lys Ile Asp Lys Ser Glu Gly Arg Phe
 225 230 235 240
 His Val Gln Asn Leu Ser Gln Val Glu Gln Asp Gly Arg Thr Gly His
 245 250 255
 Gly Leu Arg Arg Ser Ser Lys Phe Cys Leu Lys Glu His Lys Ala Leu
 260 265 270
 Lys Thr Leu Gly Ile Ile Met Gly Thr Phe Thr Leu Cys Trp Leu Pro
 275 280 285
 Phe Phe Ile Val Asn Ile Val His Val Ile Gln Asp Asn Leu Ile Arg
 290 295 300
 Lys Glu Val Tyr Ile Leu Leu Asn Trp Ile Gly Tyr Val Asn Ser Gly
 305 310 315 320
 Phe Asn Pro Leu Ile Tyr Cys Arg Ser Pro Asp Phe Arg Ile Ala Phe
 325 330 335
 Gln Glu Leu Leu Cys Ala Arg Gly Arg Thr Pro Pro Ser Leu Gly Pro
 340 345 350
 Gln Asp Glu Ser Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys Asp Thr
 355 360 365
 Ser Ser
 370

<210> 61
 <211> 382
 <212> PRT
 <213> Homo sapiens

<400> 61
 Met Asp Ser Ser Thr Gly Pro Gly Asn Thr Ser Asp Cys Ser Asp Pro
 1 5 10 15
 Leu Ala Gln Ala Ser Cys Ser Pro Ala Pro Gly Ser Trp Leu Asn Leu
 20 25 30
 Ser His Val Asp Gly Asn Gln Ser Asp Pro Cys Gly Leu Asn Arg Thr

		35					40					45				
Gly 50	Leu 50	Gly	Gly	Asn	Asp	Ser 55	Leu	Cys	Pro	Gln	Thr 60	Gly	Ser	Pro	Ser	
Met 65	Val	Thr	Ala	Ile	Thr 70	Ile	Met	Ala	Leu	Tyr 75	Ser	Ile	Val	Cys	Val 80	
Val	Gly	Leu	Phe	Gly 85	Asn	Phe	Leu	Val	Met 90	Tyr	Val	Ile	Val	Arg 95	Tyr	
Thr	Lys	Met	Lys 100	Thr	Ala	Thr	Asn 105	Ile	Tyr	Ile	Phe	Asn 110	Leu	Ala	Leu	
Ala	Asp	Ala 115	Leu	Ala	Thr	Ser	Thr 120	Leu	Pro	Phe	Gln 125	Ser	Val	Asn	Tyr	
Leu	Met 130	Gly	Thr	Trp	Pro	Phe 135	Gly	Thr	Ile	Leu	Cys 140	Lys	Ile	Val	Ile	
Ser 145	Ile	Asp	Tyr	Tyr	Asn 150	Met	Phe 155	Thr	Ser	Ile	Phe 160	Thr	Leu	Cys	Thr 160	
Met	Ser	Val	Asp 165	Arg	Tyr	Ile	Ala 170	Val	Cys 175	His	Pro	Val	Lys	Ala	Leu 175	
Asp	Phe	Arg	Thr 180	Pro	Arg	Asn	Ala 185	Lys	Ile	Val	Asn 190	Val	Cys	Asn	Trp	
Ile	Leu 195	Ser	Ser	Ala	Ile	Gly 200	Leu	Pro	Val	Met	Phe 205	Met	Ala	Thr	Thr	
Lys 210	Tyr	Arg	Gln	Gly	Ser 215	Ile	Asp	Cys	Thr	Leu	Thr 220	Phe	Ser	His	Pro	
Thr 225	Trp	Tyr	Trp	Glu	Asn 230	Leu	Leu	Lys	Ile	Cys 235	Val	Phe	Ile	Phe	Ala 240	
Phe	Ile	Met	Pro 245	Ile	Leu	Ile	Ile	Thr	Val 250	Cys	Tyr	Gly	Leu	Met 255	Ile	
Leu	Arg	Leu	Lys 260	Ser	Val	Arg	Met 265	Leu	Ser	Gly	Ser	Lys 270	Glu	Lys	Asp	
Arg	Asn 275	Leu	Arg	Arg	Ile	Thr	Arg 280	Met	Val	Leu	Val	Val 285	Val	Ala	Val	
Phe 290	Ile	Val	Cys	Trp	Thr 295	Pro	Ile	His	Ile	Tyr 300	Val	Ile	Ile	Lys	Ala	
Leu 305	Ile	Thr	Ile	Pro 310	Glu	Thr	Thr	Phe	Gln	Thr 315	Val	Ser	Trp	His	Phe 320	
Cys	Ile	Ala	Leu	Gly 325	Tyr	Thr	Asn	Ser	Cys 330	Leu	Asn	Pro	Val	Leu	Tyr 335	
Ala	Phe	Leu	Asp 340	Glu	Asn	Phe	Lys 345	Arg	Cys	Phe	Arg	Glu	Phe	Cys	Ala	
Ala	Ala	Arg 355	Gly	Arg	Thr	Pro	Pro 360	Ser	Leu	Gly	Pro	Gln 365	Asp	Glu	Ser	
Cys	Thr 370	Thr	Ala	Ser	Ser	Ser 375	Leu	Ala	Lys	Asp	Thr 380	Ser	Ser			

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<210> 62
<211> 382
<212> PRT
<213> Homo sapiens
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<400> 62															
Met	Ala	Pro	Asn	Thr	Ser	Thr	Met	Asp	Glu	Ala	Gly	Leu	Pro	Ala	Glu
1				5					10					15	
Arg	Asp	Phe	Ser	Phe	Arg	Ile	Leu	Thr	Ala	Cys	Phe	Leu	Ser	Leu	Leu
			20					25					30		
Ile	Leu	Ser	Thr	Leu	Leu	Gly	Asn	Thr	Leu	Val	Cys	Ala	Ala	Val	Ile
		35					40					45			
Arg	Phe	Arg	His	Leu	Arg	Ser	Lys	Val	Thr	Asn	Phe	Phe	Val	Ile	Ser
	50					55					60				

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Leu Ala Val Ser Asp Leu Leu Val Ala Val Leu Val Met Pro Trp Lys
65      70      75      80
Ala Val Ala Glu Ile Ala Gly Phe Trp Pro Phe Gly Ser Phe Cys Asn
      85      90      95
Ile Trp Val Ala Phe Asp Ile Met Cys Ser Thr Ala Ser Ile Leu Asn
      100     105     110
Leu Cys Val Ile Ser Val Asp Arg Tyr Trp Ala Ile Ser Ser Pro Phe
      115     120     125
Gln Tyr Glu Arg Lys Met Thr Pro Lys Ala Ala Phe Ile Leu Ile Ser
      130     135     140
Val Ala Trp Thr Leu Ser Val Leu Ile Ser Phe Ile Pro Val Gln Leu
145      150     155     160
Ser Trp His Lys Ala Lys Pro Thr Trp Pro Leu Asp Gly Asn Phe Thr
      165     170     175
Ser Leu Glu Asp Thr Glu Asp Asp Asn Cys Asp Thr Arg Leu Ser Arg
      180     185     190
Thr Tyr Ala Ile Ser Ser Ser Leu Ile Ser Phe Tyr Ile Pro Val Ala
      195     200     205
Ile Met Ile Val Thr Tyr Thr Ser Ile Tyr Arg Ile Ala Gln Lys Gln
      210     215     220
Ile Arg Arg Ile Ser Ala Leu Glu Arg Ala Ala Val His Ala Lys Asn
225      230     235     240
Cys Gln Thr Thr Ala Gly Asn Gly Asn Pro Val Glu Cys Ala Gln Ser
      245     250     255
Glu Ser Ser Phe Lys Met Ser Phe Lys Arg Glu Thr Lys Val Leu Lys
      260     265     270
Thr Leu Ser Val Ile Met Gly Val Phe Val Cys Cys Trp Leu Pro Phe
      275     280     285
Phe Ile Ser Asn Cys Met Val Pro Phe Cys Gly Ser Glu Glu Thr Gln
      290     295     300
Pro Phe Cys Ile Asp Ser Ile Thr Phe Asp Val Phe Val Trp Phe Gly
305      310     315     320
Trp Ala Asn Ser Ser Leu Asn Pro Ile Ile Tyr Ala Phe Asn Ala Asp
      325     330     335
Phe Gln Lys Ala Phe Ser Thr Leu Leu Gly Cys Tyr Arg Leu Cys Ala
      340     345     350
Ala Ala Arg Gly Arg Thr Pro Pro Ser Leu Gly Pro Gln Asp Glu Ser
      355     360     365
Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys Asp Thr Ser Ser
      370     375     380

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<210> 63
 <211> 451
 <212> PRT
 <213> Homo sapiens

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<400> 63
Met Asp Val Leu Ser Pro Gly Gln Gly Asn Asn Thr Thr Ser Pro Pro
1      5      10      15
Ala Pro Phe Glu Thr Gly Gly Asn Thr Thr Gly Ile Ser Asp Val Thr
      20      25      30
Val Ser Tyr Gln Val Ile Thr Ser Leu Leu Leu Gly Thr Leu Ile Phe
      35      40      45
Cys Ala Val Leu Gly Asn Ala Cys Val Val Ala Ala Ile Ala Leu Glu
      50      55      60
Arg Ser Leu Gln Asn Val Ala Asn Tyr Leu Ile Gly Ser Leu Ala Val
65      70      75      80
Thr Asp Leu Met Val Ser Val Leu Val Leu Pro Met Ala Ala Leu Tyr

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<210> 64
<211> 394
<212> PRT
<213> Homo sapiens

<400> 64
Met Ala Pro Trp Pro His Glu Asn Ser Ser Leu Ala Pro Trp Pro Asp
 1          5          10
Leu Pro Thr Leu Ala Pro Asn Thr Ala Asn Thr Ser Gly Leu Pro Gly
          20          25          30

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Val Pro Trp Glu Ala Ala Leu Ala Gly Ala Leu Leu Ala Leu Ala Val
 35 40 45
 Leu Ala Thr Val Gly Gly Asn Leu Leu Val Ile Val Ala Ile Ala Trp
 50 55 60
 Thr Pro Arg Leu Gln Thr Met Thr Asn Val Phe Val Thr Ser Leu Ala
 65 70 75 80
 Ala Ala Asp Leu Val Met Gly Leu Leu Val Val Pro Pro Ala Ala Thr
 85 90 95
 Leu Ala Leu Thr Gly His Trp Pro Leu Gly Ala Thr Gly Cys Glu Leu
 100 105 110
 Trp Thr Ser Val Asp Val Leu Cys Val Thr Ala Ser Ile Glu Thr Leu
 115 120 125
 Cys Ala Leu Ala Val Asp Arg Tyr Leu Ala Val Thr Asn Pro Leu Arg
 130 135 140
 Tyr Gly Ala Leu Val Thr Lys Arg Cys Ala Arg Thr Ala Val Val Leu
 145 150 155 160
 Val Trp Val Val Ser Ala Ala Val Ser Phe Ala Pro Ile Met Ser Gln
 165 170 175
 Trp Trp Arg Val Gly Ala Asp Ala Glu Ala Gln Arg Cys His Ser Asn
 180 185 190
 Pro Arg Cys Cys Ala Phe Ala Ser Asn Met Pro Tyr Val Leu Leu Ser
 195 200 205
 Ser Ser Val Ser Phe Tyr Leu Pro Leu Leu Val Met Leu Phe Val Tyr
 210 215 220
 Ala Arg Val Phe Val Val Ala Thr Arg Gln Leu Arg Leu Leu Arg Gly
 225 230 235 240
 Glu Leu Gly Arg Phe Pro Pro Glu Glu Ser Pro Pro Ala Pro Ser Arg
 245 250 255
 Ser Leu Ala Pro Ala Pro Val Gly Thr Cys Ala Pro Pro Glu Gly Val
 260 265 270
 Pro Ala Cys Gly Arg Arg Pro Ala Arg Leu Leu Pro Leu Arg Glu His
 275 280 285
 Arg Ala Leu Cys Thr Leu Gly Leu Ile Met Gly Thr Phe Thr Leu Cys
 290 295 300
 Trp Leu Pro Phe Phe Leu Ala Asn Val Leu Arg Ala Leu Gly Gly Pro
 305 310 315 320
 Ser Leu Val Pro Gly Pro Ala Phe Leu Ala Leu Asn Trp Leu Gly Tyr
 325 330 335
 Ala Asn Ser Ala Phe Asn Pro Leu Ile Tyr Cys Arg Ser Pro Asp Phe
 340 345 350
 Arg Ser Ala Phe Arg Arg Leu Leu Cys Arg Cys Ala Ala Ala Arg Gly
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 <212> PRT
 <213> Homo sapiens

<400> 65
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 Ser Asp Tyr Val Asn Tyr Asp Ile Ile Val Arg His Tyr Asn Tyr Thr
 20 25 30
 Gly Lys Leu Asn Ile Ser Ala Asp Lys Glu Asn Ser Ile Lys Leu Thr

